ANTI-CYCLONIC AREAS.

The number of anti-cyclones, or areas of high barometer, around which the winds drew in a general direction with the hands of a watch, is six. Some of these anti-cyclonic areas have been very large, covering more than one-half of the country at the same time. The pressure of the atmosphere near their centres or crests has in some cases been as high as 30.58 and 30.73 inches. The general path pursued by these meteors has been from northwest to southeast. They have largely served to determine the temperature, wind and humidity conditions of the entire country. They have also exerted a marked and potent influence on the direction, intensity, etc., of all the cyclonic centres. Some of them remained stationary, or almost so, for several days in the Northwest.

PRECIPITATION.

The rain-fall and snow-fall are graphically shown on Chart No. 2. It will be observed there was a very large excess of rain for all the Gulf States, and a deficiency for New England, the Middle and South Atlantic States. The deficiency is quite marked in northern New England and in Florida, where the precipitation falls below a single inch for the entire month. The most marked deficiency is in the Middle States, and is one and a half inches, and nearly the same in New England and the Lower Lake region.

There is an excess of about one and a half inches for the Ohio valley and Tennessee. The snow-fall in the Rocky Mountains has been unusually heavy.

TEMPERATURE.

The thermometric data are given on accompanying Chart No. 3. This chart shows that the thermal conditions were decidedly equinoctial over the larger portion of the country, excepting, of course, the mountainous and extreme northerly States and Territories. The only remarkable deficiency of temperature was in the Upper Mississippi valley. There was a slight excess in the South Atlantic States and the Ohio valley and Tennessee. The uniformity of the isothermals and their parallelism with the lines of latitude are strikingly delineated on the chart. The only departure from this parallelism is in the Appalachian region, where the influence of altitude deflects the isothermal of 45° southward.

ATMOSPHERIC PRESSURE.

The only remarkable feature in this element of the weather is the uniformity, which is strikingly appropriate to the equinoctial month. There is no considerable deviation from 30.00 inches of pressure, except in the northeastern section of the country. There, the isobars come near together, and the pressure is very low, especially in Nova Scotia and the Lower St. Lawrence valley. The isobarometric lines are found on Chart No. 3.

WINDS.

The March winds, as a glance at Chart No. 3 will show, are characteristically from the northwest. The only observable exception to this is in the easterly and southeasterly winds of the Gulf of Mexico and the Western Gulf States, in which the trade-wind in-

fluence manifests, so early in the spring, its predominance. At Mount Washington, winds were reported on the 23d, of velocity as high as 130 miles an hour and continuing near that enormous force for twenty-four hours.

RIVERS.

The condition of the rivers will be found in one of the tables on Chart No. 2. The Red river, it will be seen, rose at Shreveport to its highest as the month closed. So also the Missouri at Leavenworth. The Cumberland was very high on the 25th, but afterward fell considerably. The Ohio was in flood, the first of the month, at Cincinnati and Louisville, but it fell at the close. During the whole month the Mississippi river rose slowly but steadily at Vicksburg to forty-three feet above low water mark. Also, about the 11th, it rose at Cairo forty-five feet above low water mark, but, as the month progressed, it fell at the latter point. The month closed without any indications of very alarming floods in the Western rivers.

PECULIAR PHENOMENA AND FACTS.

From Nashville the observer reports, what may be of interest to agriculturists, that an inspection of the country around Nashville by a member of the Board of Trade of that city shows "that the grass-hoppers and other insects which are usually killed by the cold of winter are this spring alive and already moving." Repeated investigation has confirmed this statement.

At Knoxville, March 7, 7 p. m., there was an extraordinarily brilliant aurora, the first of this year, "in two bands: one triangular, base in the horizon, or near it, with opposite vertex, which was ill-defined, about 15° NW from zenith; the other was nearer in the north and far brighter, but not so extensive." The "dark segment," the "waving flag aurora," and the "merry dancers" were plainly seen for some time. The same phenomenon was seen at other points in the West where the night was cloudless. It was also reported, same night, from Albany, N. Y., where "a continuous sheet of brilliant white light encircled the horizon, extending to an altitude of 35° in the Northeast and to an altitude of 12° in the Southwest, the light in the Northeast strongly contrasted with a dark segment of slate-color beneath it and about fifty-two streamers of straw-color." On the same night and hour it was observed at Norfolk, Va., where the color was of a "pale yellow," partly obscured by clouds; and, from this point, it was visible far westward. The Observer at Pike's Peak reports that, for the first time since the occupation of the summit, he saw an auroral arch on the same evening. It was seen simultaneously at Louisville, Kentucky; at Breckenridge, Minnesota; at Eastport, Maine; faintly at Indianapolis, Indiana; apparently at Augusta, Georgia; faintly at Yankton, Dakota; Davenport, Iowa, and other points.

During the conflagration at Indianapolis on the 22d, the wind was observed not to take any cyclonic direction, but to blow in a straight line. At Mobile, on the 22d, the thermometer reached 82° F. At Augusta, Georgia, on the 16th and 17th, there were forty consecutive hours of rainfall, amounting to 5.10 inches. At Salt Lake City, on the 17th, light snow fell from a cloudless sky, while the stars were visible over the whole sky. At Marquette, on Lake Superior, where observations are taken to compare the movements of water in the Lake, and the rise and fall of the barometer, the result shows the water and barometer acted together forty times and in a contrary manner fifty-three times.